Answer 1:

Bibliographic Information

In vivo antitumor activity of S 16020-2, a new olivacine derivative. Guilbaud, N.; Kraus-Berthier, L.; Saint-Dizier, D.; Roillon, M. H.; Jan, M.; Burbridge, M.; Visalli, M.; Bisagni, E.; Pierre, A.; Atassi, G. Division Cancerologie Experimentale, Institut Recherches Servier, Suresnes, Fr. Cancer Chemotherapy and Pharmacology (1996), 38(6), 513-521. Publisher: Springer, CODEN: CCPHDZ ISSN: 0344-5704. Journal written in English. CAN 126:54548 AN 1996:645928 CAPLUS

Abstract

The antitumor activity of S 16020-2, a new olivacine deriv., was investigated in vivo and compared with adriamycin (ADR) and elliptinium acetate (ELP) activity in a panel of murine and human non-small-cell lung and breast carcinomas tumor models. S 16020-2 given i.v. was active against P388 leukemia implanted i.p., s.c., or intracerebrally. The therapeutic effect of an intermittent schedule was superior to that of single-dose treatment, allowing the i.v. administration of high total doses of S 16020-2 and resulting in the cure of 60% of mice in the i.p. P388 model. S 16020-2 was more active than EPL and showed a better therapeutic index than ADR (≥ 8 vs. 2) in this model. A good therapeutic effect of S 16020-2 was also obsd. in 3 P388 leukemia sublines displaying the classic multidrug resistance (MDR) phenotype. S 16020-2 was not active against the P388/ADR leukemia, a model highly resistant to ADR in vivo. S 16020-2 was more active than ADR and curative in the M5076 sarcoma and Lewis lung carcinoma and was less active than ADR in the B16 melanoma . Against the NCI-H460 human tumor xenograft, S 16020-2 demonstrated activity superior to that of ADR (treated /control group T/C = 20 vs. 43%, day 21). Against the MCF7 breast cancer xenograft S 16020-2 was active, but less than ADR (T/C = 23 vs. 9%, day 21), whereas ELP was active (T/C = 49%, day 24). The hematol. toxicity of S 16020-2 given to B6D2F1 mice at pharmacol. dose was less severe than that of ADR, particularly in bone-marrow stem cells.